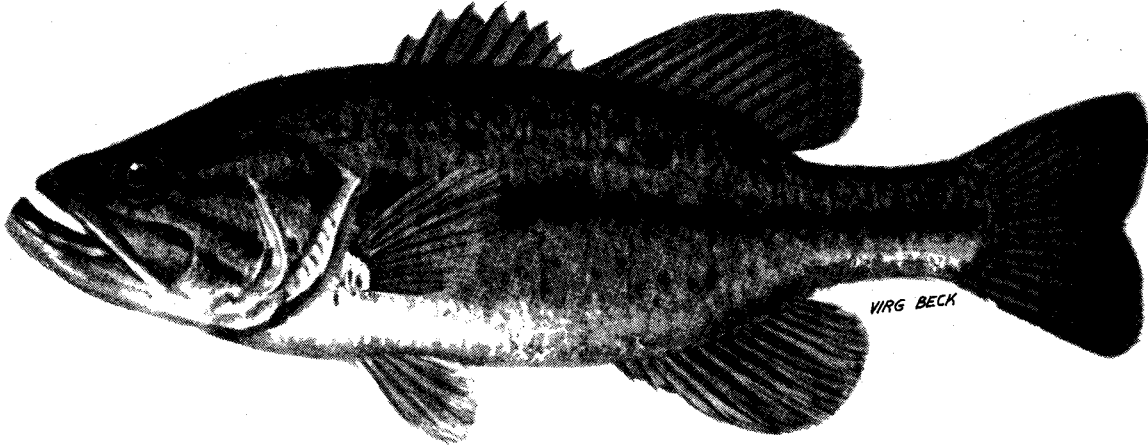


LARGEMOUTH BASS

(*Micropterus salmoides*)

By Maureen Mecozzi



Common Names

Largemouth, largemouth black bass, black bass, green bass

Wisconsin Department of Natural Resources
Bureau of Fisheries Management

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*"Mr. Bass don't read your cotton-picking
Solunar Tables — he got his **own** computer.
He's the only one that's a pro."*

— John Powell,
noted bass tournament angler

In an aquatic I.Q. test of eight fish species conducted by Chicago's Shedd Aquarium several years ago, the largemouth bass went straight to the head of the class. Tops in visual perception and the ability to discern and make judgments, the largemouth bass was the most wary of the species examined, needing to strike an artificial lure only once to learn it wasn't edible. Largemouth bass also hear and smell well, and they are capable of distinguishing shades of color in shallow water. (Smallmouth bass, a distinct but related species, came in second; the gar — ranked number eight — is not Phi[sh] Beta Kappa material.)

This scientific study confirmed what experienced and amateur anglers have known for years: The largemouth bass is one of Wisconsin's most cunning aquatic adversaries. An angler offers this

fish a banquet of minnows and worms; it ignores the tidbits. Always the gracious host, the angler switches to poppers and streamers, which the largemouth bass refuses to acknowledge. This is the point when fair-weather fisherfolk call it a day and head for the cribbage board, but those anglers who refuse to give up the fight will find that no matter how smart the largemouth bass is, it has to eat eventually — and when it's time to feed, "Mr. Bass" will bite on just about anything.

Bassers — men, women and children dedicated to the pursuit of the various bass species — are so numerous in the United States they could take over the state of Texas and not have enough room left to cast. Some of these anglers claim it is impossible to get within spitting distance of a bass without a bass boat, depth finders, light and color meters and subscriptions to all the bass magazines. In truth, the only real necessities for catching largemouth bass are a keen eye for "structure" (the word anglers use for habitat) and a well-honed awareness of weather and water. Anglers who learn the ways of the intelligent largemouth bass will have enriched their knowledge of fish and fishing enormously.

Identification

Achigan a grande bouche, the largemouth bass — the largest member of the sunfish family with a maw that has been compared to the bucket on a front-end loader. The upper jaw of this mighty mouth extends beyond the eye; it's a physical characteristic used to distinguish the largemouth bass from the smallmouth bass, whose upper jaw does not reach as far back (Fig. 1).

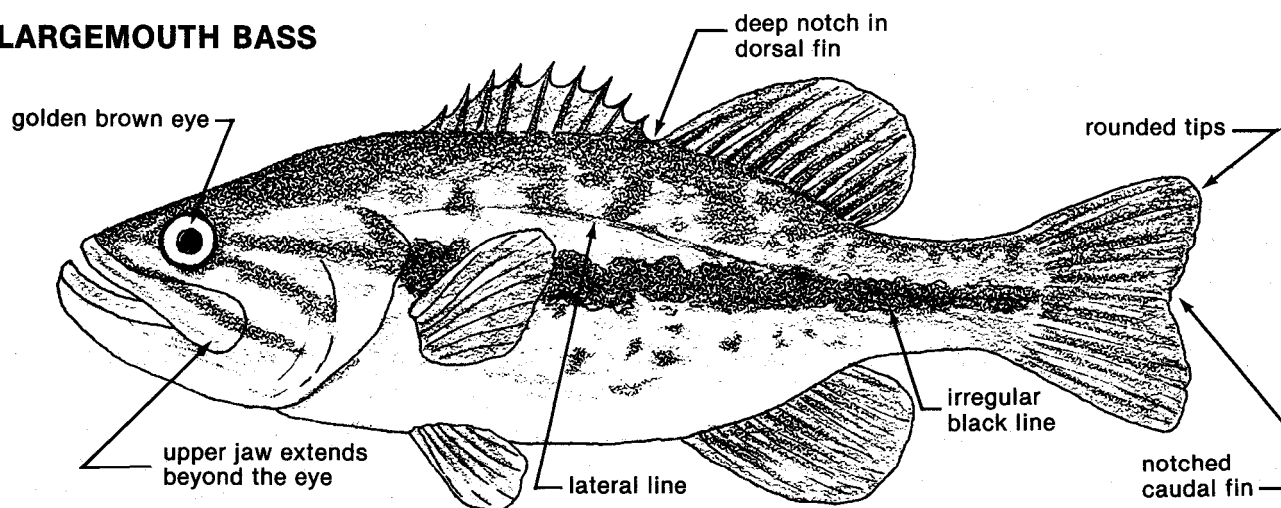
A young largemouth bass has a cigar-shaped body; as it grows, the body becomes flatter and heavier. The **dorsal** (on the back) fin is almost divided into two separate sections: the **anterior** (front) portion usually has 10 spiny rays and a jagged, scalloped edge; the paddle-shaped posterior (back) section has 12-13 soft rays and a smooth edge. In contrast, there's only a slight notch between the two sections of the dorsal fin

on the smallmouth bass. The **caudal** (tail) **fin** of the largemouth bass is notched and has rounded tips.

In coloring, largemouth bass are usually dark forest green on the back with lighter green sides, pale green bellies, and a mottling of black blotches that form an irregular horizontal line running from the eye to the caudal fin. A largemouth bass's color, however, will change with age and will be affected by the clarity of its home waters. Young largemouth bass are brighter in color, with greater contrast in markings; with age, the colors become duller and the black markings less conspicuous. Old fish become very dark. In murky waters, largemouth bass are often dark brown or nearly black, while fish from clear waters are lighter and brighter.

Look a largemouth bass right in the eye for another good identifying clue: it has golden-brown eyes, while the smallmouth bass's eyes are red.

LARGEMOUTH BASS



SMALLMOUTH BASS

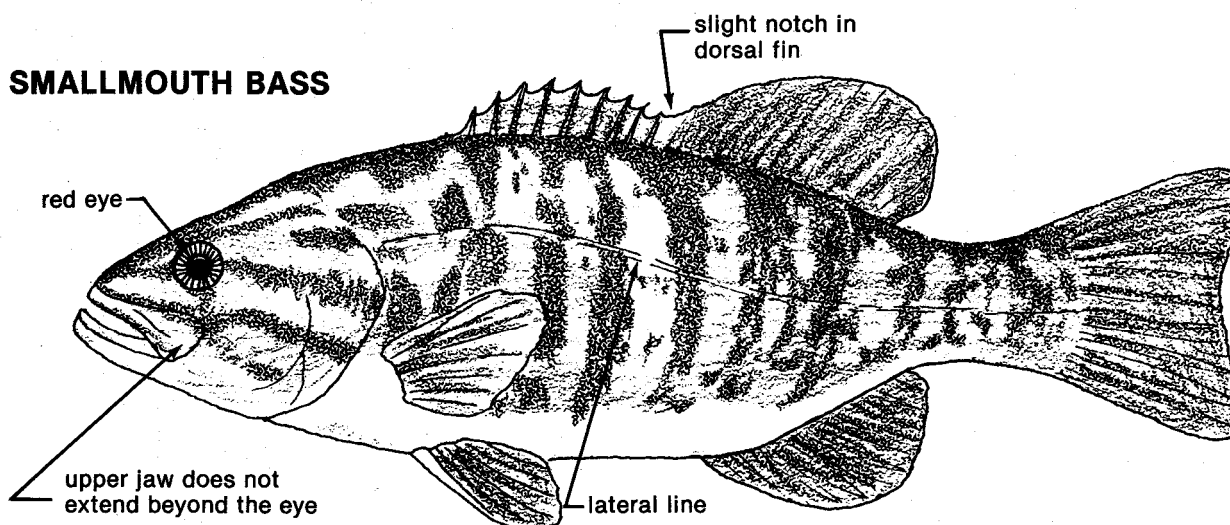


Figure 1. Identifying features between largemouth and smallmouth bass. (For more information about small mouth bass, refer to the factsheet "Smallmouth Bass").

Distribution

The largemouth bass is distributed widely throughout the state and can be found in nearly all Wisconsin waters, though it is less abundant in the driftless area of southwestern Wisconsin (Fig. 2). Although Wisconsin lies near the northern end of the largemouth bass range, the species has been here since glacial times, and its range has been expanded by extensive stocking. About 500,000 largemouth bass **fingerlings** (young fish 1-4 inches in length) are stocked yearly by DNR.

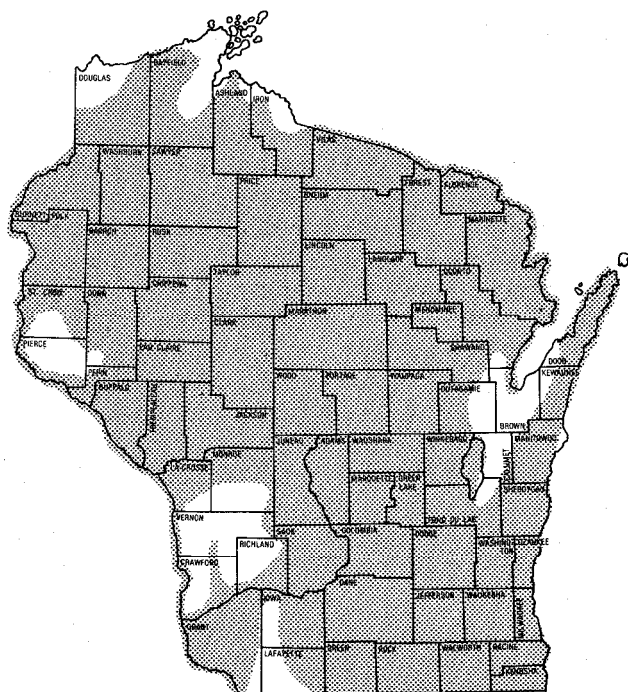
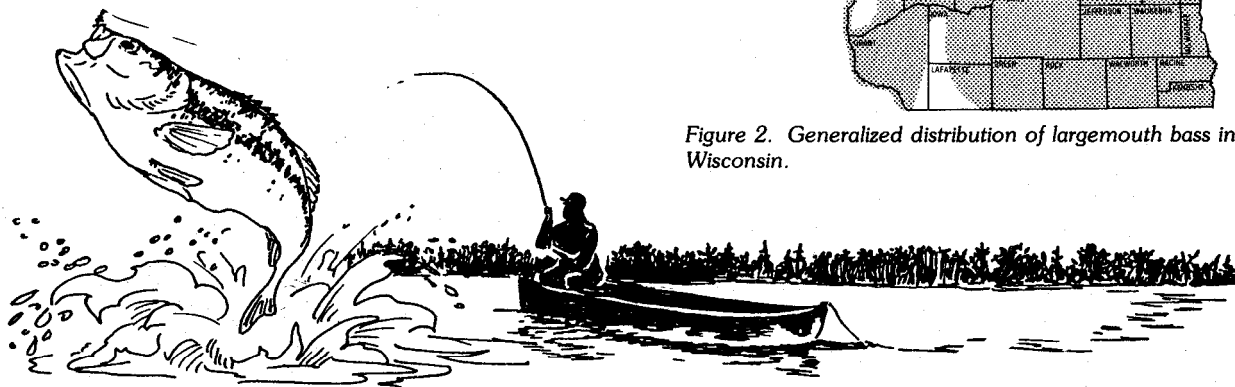


Figure 2. Generalized distribution of largemouth bass in Wisconsin.



Habits and Habitat

Warm, shallow, weedy lakes and ponds, calm river backwaters — these are the waters where largemouth bass live. They are seldom found in water more than 20 feet deep and prefer temperatures of 80-85°F.

Largemouth bass feed by sight and hunt for their food, ambushing unwary prey from behind logs and rip-rap, below boat docks, and at weed lines that drop into deeper water. Small schools of five to 10 fish can be seen cruising the shallows in search of prey, most often in the early morning hours or later in the day; they'll be on the lookout for crayfish, frogs, large insects, fish — including golden shiners, bluegills and other largemouth bass — basically, anything that's not too wide to slide into their cavernous mouths. These clever aquatic hunters will follow feeding ducks and other animals to snatch the prey flushed from hiding.

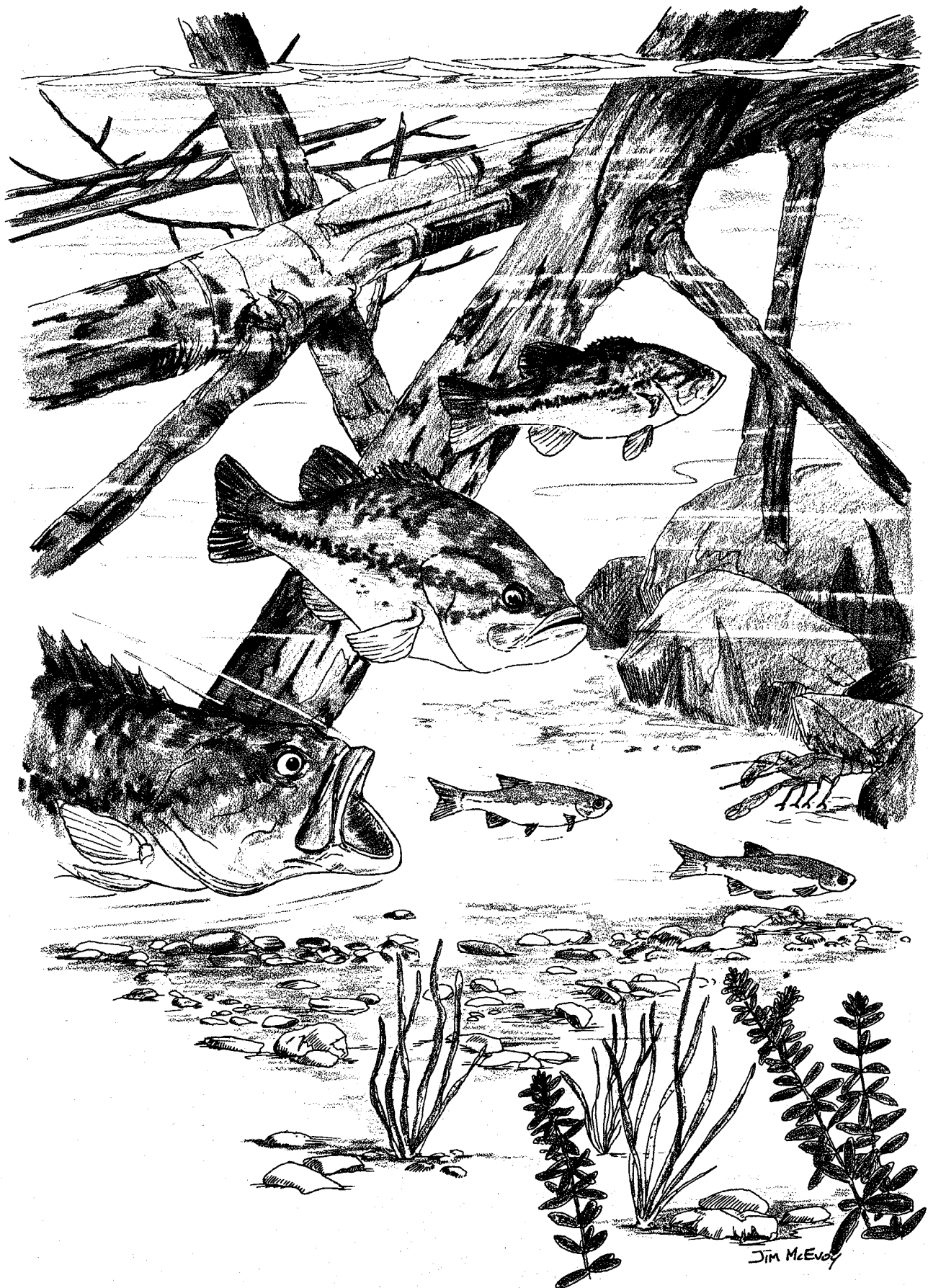
When a largemouth bass begins to feed, its eyes will glow and the anterior dorsal fin becomes erect. The fish may also "yawn" by flaring its gill covers and opening its mouth.

Although they are primarily sight feeders,

largemouth bass can hear and smell prey as well. Sounds 20 feet or less away are detected by the fish's lateral line — a line of sensitive nerve endings running along each side of the body, from gill flaps to the caudal fin. Sounds over 20 feet away are detected by the inner ear. Adult largemouth bass have refined **olfactory** (smell) organs and use them to pick up the scent of nearby predators or prey.

During the daytime, largemouth bass can be found under lily pads or in the shade of overhanging trees, piers or brush. After an evening feeding, the fish head for deeper water, where they rest on the bottom under logs or trees, with their throats touching the bottom and their caudal fins slightly elevated. They are seldom found at depths greater than the deepest water in which rooted vegetation grows.

Feeding slows when temperatures begin to drop in late fall. During winter, the fish are relatively inactive and will remain in deep water until the shallow bays, channels and streams warm up in the spring. Largemouth bass are often victims of **winterkill** (low oxygen and/or low temperature conditions) — a frequent occurrence in the shallow, weedy waters they prefer.



Life cycle

Largemouth bass spawn from late April until early July; fish in the northern part of the state spawn about two weeks later than those in the south. Generally, the fish select nest sites when water temperatures reach 60°F, and egg laying occurs at temperatures of 62-65°F.

The male largemouth bass usually selects a sand or gravel bottom on which to build a nest in about 18 inches of water. The male sweeps out a huge basin with his fins, sometimes as large as three feet in diameter and a foot deep; unlike the other sunfishes, which nest in colonies, largemouth bass choose to build their nests at least 30 feet apart (Fig. 3).

When a female approaches the nest, the male will nip her flank, and the female will depart. She returns a little later, floating on her side, head down. The male will allow her to enter the nest in this position. Both fish lie on the bottom of the nest with their caudal fins overlapping, and then the female releases her eggs to be fertilized by the male's **milt** (sperm). The fish float out to the borders of the nest, then return to the bottom again to repeat the spawning act several times over the course of an hour. Males will spawn with more than one female in the nest, and females may lay eggs in several nests. When spawning is complete, each nest will contain about 5,000 pale yellow eggs.

Male largemouth bass are territorial and fiercely guard the nest from intruders while they fan the water over the nest with their fins. Good water circulation and aeration is important for the development of the eggs, which will hatch in three to seven days. The **fry** (newly hatched fish) remain at the bottom of the nest until the yolk sac they hatch with is absorbed, usually in about a week. Then, the fry rise from the nest and begin

feeding; they may remain in a swarm for up to a month, guarded by the male for all or most of the time.

Swarms from two to five nests join together to form schools as the fish reach fingerling size. The adult males accompany their young to protect them from predators as the school leaves the nest to feed. In a few days the adult leaves and the school disperses. Predation from many species of fish, birds and aquatic animals takes its toll.

The tendency to school decreases as the fish age. Largemouth bass hunt in small schools of five to 10 fish as young adults; older fish tend to be solitary.

Largemouth bass grow most rapidly in length for the first two years of life, then fill out their lanky frames as they age. The fish reach maturity in three to four years at an average length of 10-12 inches. Females live about 9 years; males, about 6 years. Largemouth bass in northern states live longer than those in southern states.

Age (years)	Length (inches)	Weight (pounds)
1	6.7	.18
2	8.7	.38
3	11.3	.85
4	12.6	1.2
5	13.7	1.5
6	15.4	2.3
7	16.8	3.0

Muskellunge, northern pike, walleye and perch are among the predators that seek out the young largemouth bass; the fish also fall prey to the other members of the sunfish family — bluegills, pumpkinseeds, green sunfish and smallmouth bass. Those that survive their youth face predation from humans. Largemouth bass must also contend with the bass tapeworm, which attacks the reproductive organs and renders the fish sterile.

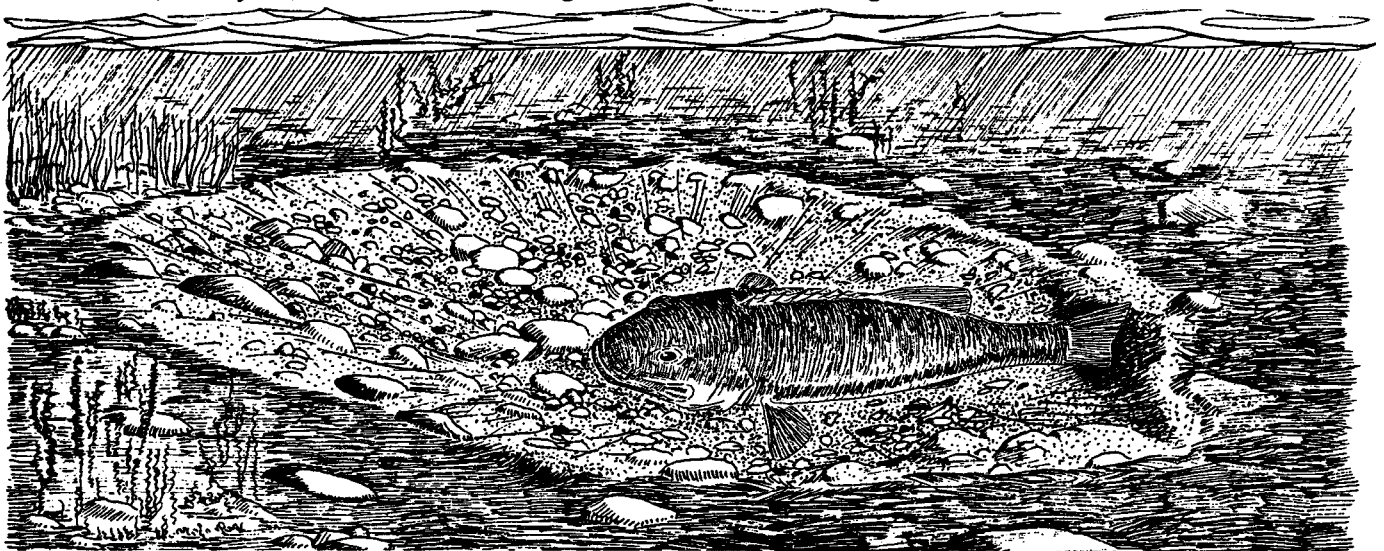


Figure 3. Male largemouth bass defending its nest.

Fishing for largemouth bass

So you want to catch a largemouth bass, do you? Follow these three easy steps outlined by Grits Gresham, author of *The Complete Book of Bass Fishing*: Look for structure, find the pattern, and hope you get lucky.

"Structure" is what the largemouth bass calls home: inflowing or outflowing streams, points, reefs, submerged trees, docks, rafts, tree stumps, beds of vegetation, sunken islands, rock and rip-rap, drop-offs. These will be the areas where you'll want to wet your line. When fishing shallow, visible structure, look for spots slightly different from the rest of the cover — in cattails along shore, for example, cast near pockets or points of cattails, or by patches of other vegetation within the cattails.

"Finding the pattern" requires that the angler be willing to experiment and be able to interpret the results of the test. For instance: Late on a sunny afternoon, you are fishing stump structure in a small lake in about 4 feet of water with a spinner-skirt lure, and you notice that when you cast to the shady side of the stump and slowly drag the lure just a few inches from the stump, you get a strike. Aha! This is the pattern! Fish stumps with the same lure in the same fashion in another section of the lake and you're likely to fill your stringer — maybe.

If the sun should slip behind the clouds, let's say, or if you lose that spinner-skirt lure and switch to minnows, the fish may stop biting. You've lost the pattern. Look around you — what's different about the structure you're fishing? Where did you cast last, how did you cast, and what lure were you using? Did the wind suddenly pick up? Be flexible, make keen observations and adjustments in your angling technique, and find another pattern. The largemouth bass has thousands of patterns from which to choose, but the angler need only discover one to make a catch. Forget about the odds and match your fishing smarts against those of the brainy largemouth bass.

A well-stocked tackle box will provide the necessary equipment for your bassin' experiments. Live baits, surface plugs, underwater plugs, poppers on a fly rod, streamers: almost any type of bait will attract largemouth bass when they're hungry (Fig. 4).

If you catch a "bucketmouth," consider releasing it to let some other angler match wits with this intelligent species. To catch and release, don't land the fish; reel it in next to the side of the boat and remove the hook as gently as possible with pliers, or cut the hook off with a wire cutter.

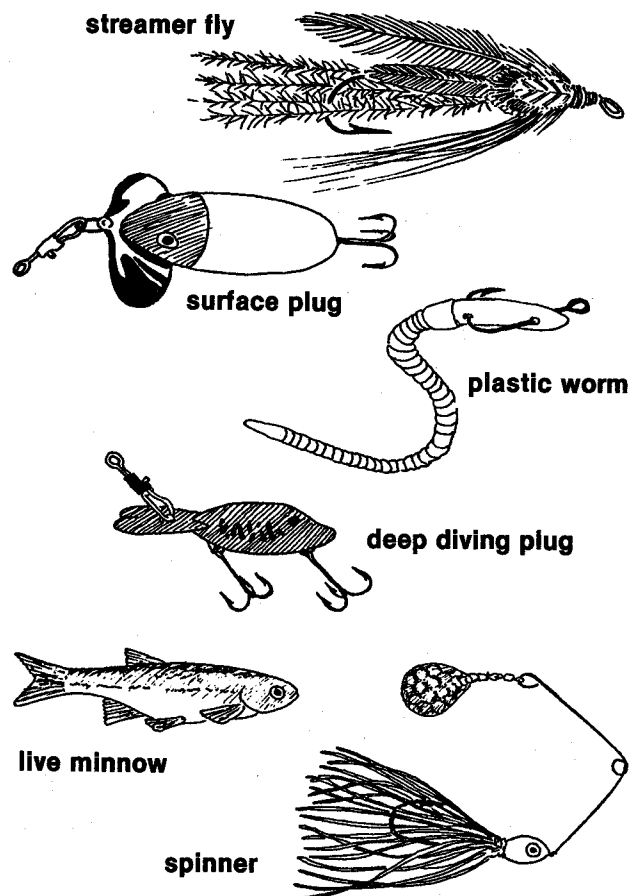


Figure 4. Some examples of the many kinds of baits used to catch largemouth bass.

Environmental concerns

Loss of good spawning and feeding habitat can harm healthy largemouth bass populations. Soil erosion from improper land use is the leading factor in habitat degradation; excessive use of fertilizers and improper use of pesticides also contributes to the loss.

Bottom-feeding carp disturb aquatic vegetation and create excessive **turbidity** (murkiness caused by solids suspended in water), rendering the water unfit for largemouth bass.

For information on bag limits, legal size and seasons for largemouth bass, pick up a copy of Wisconsin's fishing regulations at the nearest DNR office.

Additional reading

Becker, George C. **Fishes of Wisconsin**, University of Wisconsin Press, Madison, 1983.

Gresham, Grits. **Complete Book of Bass Fishing**, Harper & Row, New York, 1966.

Herald, Earl S. **Fishes of North America**, Doubleday & Co., New York, 1979.